SYLLABUS
ENR 4900.02
Environment and Natural Resources Management for Forestry Fisheries and Wildlife
Autumn 2020 (full term)
3 credit hours
Online

COURSE OVERVIEW

Instructor
Dr. William Peterman
Email address: Peterman.73@osu.edu (preferred contact method)
Phone number: 573-823-0768  Office: 375B Kottman Hall
Office hours: Thursday 8:00 am – 12:00 pm on Zoom

Teaching Assistant
TBD
Email address: XXX@osu.edu (preferred contact method)
Phone number:
Office hours:

Prerequisites
Junior or Senior standing in ENR
Course description

Catalog description: Application and integration of technical knowledge and methodologies in the forestry, fisheries, and wildlife sciences to planning, problem-solving, and decision-making in environment and natural resources.

Students will be provided with the necessary tools to work with other natural resource professionals through application of natural resource (e.g., forestry, wildlife, recreation) inventory methods. Students will identify an area of expertise that their final project will revolve around. Areas of expertise may include (but are not limited to) (1) Forest resources – quantification and analysis to better understand ecological, economic, and social aspects of forest ecosystems, including forest ecosystem restoration methods; (2) Wildlife resources – assessment of wildlife communities and the potential impacts of different management techniques on the quality of wildlife habitat; (3) Recreation resources – how are management decisions likely to affect various stakeholders (e.g., local community members, recreation users), and/or what are recreation users’ perceptions of access and availability of resources; (4) Education / Outreach – identify education or outreach needs, and develop materials to address these.

Course format

This course consists of four parts:

1. Planning and development of a comprehensive project
2. Data collection (must be completed outside of class)
3. Data analyses and presentations
4. Writing of results and management recommendations, final reports/documents

*Students should be prepared to work on projects during class time as well as outside of class time to be successful.

Course learning outcomes

By the end of this course, students should successfully be able to:

- Apply the subject matter of their previous college courses in identifying, analyzing, and solving natural resource problems that arise in practice for a land management agency, specifically the design and implementation of resource inventory analysis, and formulating plans and recommendations
- Work as a member of a disciplinary and/or interdisciplinary team, allocate responsibilities, budget time and resources to accomplish specific missions, goals, and objectives within constraints of personnel, time, finances, etc.
- Prepare a written, integrated, technical report, based on the design, collection and analysis of field data that will provide a basis for recommended actions
HOW THIS ONLINE COURSE WORKS

Mode of delivery: This course is 100% online. Course meetings will occur synchronously via Zoom during the scheduled meeting time on Monday & Wednesday (12:15 –1:35 pm). During this time, we will have whole group discussions and presentations, or we will utilize breakout rooms.

Pace of online activities: Students are expected to be present online in the Zoom classroom during the scheduled class time.

Credit hours and work expectations: This is a 3-credit-hour course. According to Ohio State policy (go.osu.edu/credithours), students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of (C) average.

Attendance and participation requirements: Because this is an online course, your attendance is based on your online activity and participation. The following is a summary of students’ expected participation:

- Participating in online activities for attendance: TWICE PER WEEK
  You are expected to be present on Zoom during our scheduled course meeting time. Student success in this course is tied to regular attendance. Absences can be excused with communication and documentation related to the absence. If you have a situation that might cause you to miss class, please discuss with me as soon as possible.

- Office hours and live sessions: OPTIONAL
  Office hours are optional, but available Thursdays 8:00–12:00. Email me to set up a Zoom meeting.

- Contribute to group project: REQUIRED
  A significant component of this course and your grade revolve around completion of a group project. All students must contribute to this project.

COURSE MATERIALS AND TECHNOLOGIES

There is no textbook for this course. Course materials (e.g., handouts, relevant readings) will be available on Carmen (https://carmen.osu.edu). Students will also be provided with maps/GIS layers of the project area. Students will need access to a computer capable of installing and running GIS software (e.g., QGIS). See Required Software section below.
Course technology

Technology support

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at [ocio.osu.edu/help/hours](http://ocio.osu.edu/help/hours), and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** [ocio.osu.edu/help](http://ocio.osu.edu/help)
- **Phone:** 614-688-4357 (HELP)
- **Email:** servicedesk@osu.edu
- **TDD:** 614-688-8743

Technology skills needed for this course

- Basic computer and web-browsing skills
- Navigating Carmen ([go.osu.edu/canvasstudent](http://go.osu.edu/canvasstudent))
- CarmenZoom virtual meetings ([go.osu.edu/zoom-meetings](http://go.osu.edu/zoom-meetings))
- Recording a slide presentation with audio narration ([go.osu.edu/video-assignment-guide](http://go.osu.edu/video-assignment-guide))
- Recording, editing, and uploading video ([go.osu.edu/video-assignment-guide](http://go.osu.edu/video-assignment-guide))
- Use of GIS (QGIS and/or ArcGIS, ArcPro)

Required equipment

- **Computer:** current Mac (MacOs) or PC (Windows 10) with high-speed internet connection
- **Webcam:** built-in or external webcam, fully installed and tested
- **Microphone:** built-in laptop or tablet mic or external microphone
- **Other:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication

Required software

- **Microsoft Office 365:** All Ohio State students are now eligible for free Microsoft Office 365. Full instructions for downloading and installation can be found at [go.osu.edu/office365help](http://go.osu.edu/office365help).
- QGIS or ArcGIS software will be required. QGIS can be freely downloaded on any operating system. If this isn’t possible, we can arrange remote access to a computer with relevant software installed.
Carmen access

You will need to use BuckeyePass (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device help article for step-by-step instructions (go.osu.edu/add-device).
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click Enter a Passcode and then click the Text me new codes button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the Duo Mobile application (go.osu.edu/install-duo) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357(HELP) and IT support staff will work out a solution with you.

GRADING AND FACULTY RESPONSE

How your grade is calculated

<table>
<thead>
<tr>
<th>ASSIGNMENT CATEGORY</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocols (Draft &amp; Final)</td>
<td>100 (50 / 50)</td>
</tr>
<tr>
<td>Background Section (Submission &amp; Peer Review)</td>
<td>100 (50 / 50)</td>
</tr>
<tr>
<td>Methods Section (Submission &amp; Peer Review)</td>
<td>100 (50 / 50)</td>
</tr>
<tr>
<td>Results Section (Submission &amp; Peer Review)</td>
<td>100 (50 / 50)</td>
</tr>
<tr>
<td>Group Presentation</td>
<td>200</td>
</tr>
<tr>
<td>Final Written Report</td>
<td>300</td>
</tr>
<tr>
<td>Participation</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,000</strong></td>
</tr>
</tbody>
</table>

Refer to Carmen for final due dates and guidance for completing all assignments.
Descriptions of major course assignments

Protocols
Description:
Development and description of the protocols that will be followed during the collection of data for your project.

Background Section
Description:
Researching and writing the background section of your final report. Half of the points (50) will be earned for your group-written section. The other half of the points (50) are for your independent peer-review of another group’s section.

Methods Section
Description:
Writing the methods section of your final report. Half of the points (50) will be earned for your group-written section. The other half of the points (50) are for your independent peer-review of another group’s section.

Results Section
Description:
Writing the results section of your final report. Half of the points (50) will be earned for your group-written section. The other half of the points (50) are for your independent peer-review of another group’s section.

Group Presentation
Description:
Groups will give a short (~12 minute) presentation detailing their project, major findings, and key conclusions.

Final Written Report
Description:
Final report that will be delivered to the collaborating stakeholder. This report will be a comprehensive summary of your data collection, analysis, and management recommendations. Peer review comments must be incorporated into this final document.
Participation

Description:
Each week, you are expected to be an active and engaged participant in the discussion of assigned readings, and to be present and contributing to your group project. A portion of your participation will be determined by your peers through peer evaluation of your efforts and contribution throughout the group project.

Academic integrity and collaboration [Applicable to all assignments above]:

- **GROUP WORK:** A large component of this course revolves around group collaboration. I recognize that these can be stressful for students when it comes to dividing work, taking credit, and receiving grades and feedback. I have attempted to make the guidelines for group work as clear as possible, but please let me know if you have any questions.

- **COLLABORATION:** This course is designed to foster formal collaboration.

- **WRITTEN ASSIGNMENTS:** Written assignments will be completed within groups (e.g., report sections), while peer reviews will be independent. In all instances, submitted writing must be original work. We will follow standard scientific writing procedures for citing work and supporting ideas. Detailed guidance for writing format expectation can be found on Carmen and/or the associated assignment instruction document.

Late assignments

*Late assignments will be issued a 5% percent penalty for every 24 hours late, including weekends* Communication/documentation of extenuating circumstances will remove this penalty. Please refer to Carmen for due dates.

Grading scale

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>93–100</td>
<td>A</td>
</tr>
<tr>
<td>90–92.9</td>
<td>A-</td>
</tr>
<tr>
<td>87–89.9</td>
<td>B+</td>
</tr>
<tr>
<td>83–86.9</td>
<td>B</td>
</tr>
<tr>
<td>80–82.9</td>
<td>B-</td>
</tr>
<tr>
<td>77–79.9</td>
<td>C+</td>
</tr>
<tr>
<td>73–76.9</td>
<td>C</td>
</tr>
<tr>
<td>70–72.9</td>
<td>C-</td>
</tr>
<tr>
<td>67–69.9</td>
<td>D+</td>
</tr>
<tr>
<td>60–66.9</td>
<td>D</td>
</tr>
<tr>
<td>Below 60</td>
<td>E</td>
</tr>
</tbody>
</table>
Instructor feedback and response time

I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call 614-688-4357(HELP) at any time if you have a technical problem.)

- **Grading and feedback:** For large weekly assignments, you can generally expect feedback within 7 days.
- **Email:** I will reply to emails within 24 hours on days when class is in session at the university.

OTHER COURSE POLICIES

Discussion and communication guidelines

The following are my expectations for how we should communicate as a class. **Above all, please remember to be respectful and thoughtful.** A significant component of our interactions in this class will occur through Zoom videoconferencing (NOTE: meetings will **not** be recorded). Because this mode of discussion has benefits and challenges that differ from in-person class sessions, I want to share my expectations for how we will meet and communicate:

- Come to the session having completed the assigned readings and ready to have open, civil, and supportive discussions in video and chat spaces.
- Be present during the entire class session.
- I ask that you update your Zoom profile with your preferred name and add a picture with your face.
- As your internet connectivity permits, I ask that you keep your camera on at all times so that we can see each other and more meaningfully connect.
- Please feel encouraged to use a non-distracting virtual background.
- Mute your microphone when others are talking to minimize background noise in the meeting.

If you have any concerns about participating in class over Zoom in this way, please let me know. My goal is to create a safe environment where we can benefit from seeing each other and connecting, but I want to prioritize your safety and well-being.
• **Tone and civility:** Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm doesn't always come across online.

**Academic integrity policy**

See [Descriptions of major course assignments](#), above, for my specific guidelines about collaboration and academic integrity in the context of this online class.

**Ohio State’s academic integrity policy**

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the university’s **Code of Student Conduct** ([studentconduct.osu.edu](http://studentconduct.osu.edu)), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the university’s **Code of Student Conduct** and this syllabus may constitute "Academic Misconduct."

The Ohio State University’s **Code of Student Conduct** (Section 3335-23-04) defines academic misconduct as: “Any activity that tends to compromise the academic integrity of the university or subvert the educational process.” Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the university’s **Code of Student Conduct** is never considered an excuse for academic misconduct, so I recommend that you review the **Code of Student Conduct** and, specifically, the sections dealing with academic misconduct.

**If I suspect that a student has committed academic misconduct in this course, I am obligated by university rules to report my suspicions to the Committee on Academic Misconduct.** If COAM determines that you have violated the university’s **Code of Student Conduct** (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the university. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- Committee on Academic Misconduct web page ([go.osu.edu/coam](http://go.osu.edu/coam))
- Ten Suggestions for Preserving Academic Integrity ([go.osu.edu/ten-suggestions](http://go.osu.edu/ten-suggestions))
- Eight Cardinal Rules of Academic Integrity ([go.osu.edu/cardinal-rules](http://go.osu.edu/cardinal-rules))
Copyright for instructional materials

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Statement on Title IX

All students and employees at Ohio State have the right to work and learn in an environment free from harassment and discrimination based on sex or gender, and the university can arrange interim measures, provide support resources, and explain investigation options, including referral to confidential resources.

If you or someone you know has been harassed or discriminated against based on your sex or gender, including sexual harassment, sexual assault, relationship violence, stalking, or sexual exploitation, you may find information about your rights and options at titleix.osu.edu or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu. Title IX is part of the Office of Institutional Equity (OIE) at Ohio State, which responds to all bias-motivated incidents of harassment and discrimination, such as race, religion, national origin and disability. For more information on OIE, visit equity.osu.edu or email equity@osu.edu.

Commitment to a diverse and inclusive learning environment

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Your mental health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily
activities. No matter where you are engaged in distance learning, The Ohio State University’s Student Life Counseling and Consultation Service (CCS) is here to support you. If you find yourself feeling isolated, anxious or overwhelmed, on-demand resources are available at [go.osu.edu/ccsondemand](http://go.osu.edu/ccsondemand). You can reach an on-call counselor when CCS is closed at 614-292-5766, and 24-hour emergency help is also available through the 24/7 National Prevention Hotline at 1-800-273-TALK or at [suicidepreventionlifeline.org](http://suicidepreventionlifeline.org). The Ohio State Wellness app is also a great resource available at [go.osu.edu/wellnessapp](http://go.osu.edu/wellnessapp).

**ACCESSIBILITY ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES**

**Requesting accommodations**

The university strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability including mental health, chronic or temporary medical conditions, please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. **SLDS contact information:** [slds@osu.edu](mailto:slds@osu.edu); 614-292-3307; 098 Baker Hall, 113 W. 12th Avenue.

**Accessibility of course technology**

This online course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.

- Canvas accessibility ([go.osu.edu/canvas-accessibility](http://go.osu.edu/canvas-accessibility))
- Streaming audio and video
- CarmenZoom accessibility ([go.osu.edu/zoom-accessibility](http://go.osu.edu/zoom-accessibility))
- Collaborative course tools
# COURSE SCHEDULE

Refer to the Carmen course for up-to-date assignment due dates.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Activities</th>
<th>Due Dates for Class Products (Submit all assignments to Carmen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26-Aug</td>
<td>Introductions, review syllabus, Group project introductions</td>
<td>Interest survey (In class)</td>
</tr>
<tr>
<td>2</td>
<td>31-Aug</td>
<td>Form project teams WORKSHOP: Goals, objectives and actions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-Sep</td>
<td>Emily Spyolt, Green Columbus</td>
<td>Submit <strong>GOALS AND OBJECTIVES</strong> by 11pm on <strong>Friday, 9/4</strong></td>
</tr>
<tr>
<td>3</td>
<td>7-Sep</td>
<td>NO CLASS – Labor Day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9-Sep</td>
<td>WORKSHOP: Project design</td>
<td>Submit <strong>DRAFT OF SAMPLING PROTOCOL &amp; DATASHEETS</strong> by 11pm on <strong>Friday, 9/11</strong></td>
</tr>
<tr>
<td>4</td>
<td>14-Sep</td>
<td>WORKSHOP: Project design &amp; implementation</td>
<td>Submit <strong>FINAL SAMPLING PROTOCOL &amp; DATASHEETS</strong> by 11pm on <strong>Monday, 9/14</strong></td>
</tr>
<tr>
<td></td>
<td>16-Sep</td>
<td>WORKSHOP: Literature Search</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>21-Sep</td>
<td>DISCUSSION: Introduction/Background</td>
<td>READ: <strong>Chapter 10</strong> – Scientist's Guide to Writing</td>
</tr>
<tr>
<td></td>
<td>23-Sep</td>
<td>DISCUSSION: Peer review</td>
<td>Submit <strong>PRELIMINARY REFERENCE LIST</strong> by 11pm <strong>Wed., 9/23</strong></td>
</tr>
<tr>
<td>6</td>
<td>28-Sep</td>
<td>WORKSHOP: Intro/Background</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30-Sep</td>
<td>DISCUSSION: Methods</td>
<td>Submit <strong>1st draft report section (Background)</strong> by 11pm on <strong>Wed., 9/30</strong> READ: <strong>Chapter 11</strong> – Scientist's Guide to Writing</td>
</tr>
<tr>
<td>7</td>
<td>5-Oct</td>
<td>WORKSHOP: Intro/Background</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7-Oct</td>
<td>WORKSHOP: Methods</td>
<td>Submit <strong>Peer Review: Draft Background</strong> by 11pm on <strong>Wed., 10/07</strong></td>
</tr>
<tr>
<td>8</td>
<td>12-Oct</td>
<td>WORKSHOP: Methods</td>
<td>READ: <strong>Chapter 12</strong> – Scientist's Guide to Writing</td>
</tr>
<tr>
<td></td>
<td>14-Oct</td>
<td>DISCUSSION: Results</td>
<td>Submit <strong>2nd draft report section (Methods)</strong> by 11pm on <strong>Wed., 10/14</strong></td>
</tr>
<tr>
<td>9</td>
<td>19-Oct</td>
<td>WORKSHOP: Results &amp; Statistics</td>
<td>ALL DATA COLLECTION MUST BE COMPLETE!!! Come to class with entered data.</td>
</tr>
<tr>
<td></td>
<td>21-Oct</td>
<td>WORKSHOP: Results &amp; Statistics</td>
<td>Submit <strong>Peer Review: Draft Methods</strong> by 11pm on <strong>Wed., 10/21</strong></td>
</tr>
<tr>
<td>10</td>
<td>26-Oct</td>
<td>WORKSHOP: GIS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28-Oct</td>
<td>WORKSHOP: GIS</td>
<td>Submit 3rd <strong>draft report section (Results)</strong> by 11pm on <strong>Fri., 10/28</strong></td>
</tr>
<tr>
<td>11</td>
<td>2-Nov</td>
<td>WORKSHOP: Presentations</td>
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</tr>
<tr>
<td></td>
<td>4-Nov</td>
<td>WORKSHOP: Presentations</td>
<td>Submit <strong>Peer Review: Draft Results</strong> by 11pm on <strong>Wed., 11/04</strong></td>
</tr>
<tr>
<td>12</td>
<td>9-Nov</td>
<td>WORKSHOP: Presentations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11-Nov</td>
<td>No Class – Veteran's Day</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>16-Nov</td>
<td>Presentations</td>
<td>Submit <strong>presentations</strong> by 11pm on <strong>Sunday 11/15</strong></td>
</tr>
<tr>
<td></td>
<td>18-Nov</td>
<td>Presentations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25-Nov</td>
<td>WORKSHOP: Report Writing</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>30-Nov</td>
<td>WORKSHOP: Report Writing</td>
<td>Submission deadline on final report if feedback on draft desired</td>
</tr>
<tr>
<td></td>
<td>2-Dec</td>
<td>Final Reports Due</td>
<td>Submit <strong>FINAL REPORT</strong> by 5pm on <strong>Fri., 12/04</strong></td>
</tr>
</tbody>
</table>